

Status of the Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

1. (currently amended) A ~~micro-optoelectro-mechanical system (MOEMS)~~ ~~integrated circuit~~ spatial light modulator, comprising:

~~an array of~~ reflective devices;

a solid and substantially rigid substrate; and

an integrated circuit actuator comprising actuator elements and first and second sets of electrodes, coupled to a substrate, the integrated circuit actuator having an array of actuator elements; and

~~first and second arrays of electrodes coupled to opposite walls of the actuator elements~~

wherein respective electrodes in the first set of electrodes are coupled to a first portion of respective ones of the actuator elements and are coupled to respective ones of the reflective devices, and

wherein respective electrodes in the second set of electrodes are coupled to a second portion of the respective ones of the actuator elements and are coupled to the solid and substantially rigid substrate.

2. (currently amended) The spatial light modulator of claim 1, wherein the actuator elements and electrodes are configured to move the reflective ~~devices~~ elements in two directions.

3. (currently amended) The spatial light modulator of claim 1, wherein the actuator elements and electrodes are configured to move the reflective ~~devices~~ elements in four directions.

4. (currently amended) The spatial light modulator of claim 1, wherein each electrode in the second ~~set~~ array of electrodes comprises first and second electrode sections.

5. (currently amended) The spatial light modulator of claim 4, wherein the first and second electrode sections and the first ~~array~~ set of electrodes are configured to allow the actuator elements to tilt the reflective devices.

6. (currently amended) The spatial light modulator of claim 1, further comprising:

a first coupling device between the actuator elements and electrodes in the second ~~array~~ set of electrodes; and

a second coupling device between electrodes in the first ~~array~~ set of electrodes.

7. (original) The spatial light modulator of claim 1, wherein adjacent ones of the actuator elements have different heights.

8. (original) The system of claim 2, wherein the actuator element moves the reflecting device about one-quarter of a wavelength of light in each direction.

9. (cancelled)

10. (original) The spatial light modulator of claim 1, wherein the actuator elements are configured such that the reflective devices form an overall curved shape.

11. (currently amended) The spatial light modulator of claim 1, wherein the actuator elements are formed in varying heights and positions on the solid and substantially rigid substrate, such that varying wavefront patterns are generated by light reflecting therefrom.

12-26 (cancelled)

27. (Currently Amended) The system of claim 3, wherein the actuator ~~element~~
elements move ~~moves~~ the reflecting device about one-quarter of a wavelength of light in
each direction.

28. (cancelled)